

CLAIMS

What is claimed is:

1. A method of operating a radio frequency communication system having a receiver portion and a transmitter portion, the method comprising:
 - arranging the transmitter portion and the receiver portion in a first configuration;
 - taking a first signal power measurement;
 - configuring the transmitter portion and the receiver portion in a second configuration;
 - performing a second signal power measurement; and
 - adjusting the operation of the receiver portion based upon the first signal power measurement and the second signal power measurement.
2. The method of claim 1 wherein the arranging, taking, configuring, performing, and adjusting occur on a periodic basis.
3. The method of claim 1 wherein the radio frequency communication system communicates digital information.
4. The method of claim 1 wherein the receiver portion and the transmitter portion are located within the same integrated circuit.
5. The method of claim 1 wherein the adjusting comprises calibrating at least one of the slope and the fixed offset of a receive signal strength indicator.
6. The method of claim 1 wherein the adjusting comprises modifying the value of a receive signal strength indicator using an affine function.
7. The method of claim 6 wherein the affine function is implemented using a look-up table.

8. The method of claim 1 wherein the adjusting comprises modifying at least one threshold related to the processing of receive signal strength indicator data used in the operation of the radio frequency communication system.

9. The method of claim 1 wherein the adjusting comprises modifying at least one of a receive signal strength indicator slope and a receive signal strength indicator fixed offset in an analog receive signal strength indicator circuit.

10. The method of claim 1 wherein the arranging provides a relatively lower level of radio frequency signal to the receiver portion.

11. The method of claim 10 wherein the relatively lower level of radio frequency signal corresponds to a signal power of less than approximately -90 dBm.

12. The method of claim 1 wherein the configuring provides a relatively higher level of radio frequency signal to the receiver portion.

13. The method of claim 12 wherein the relatively higher level of radio frequency signal corresponds to a signal power of greater than approximately -30 dBm.

14. The method of claim 1 further comprising:
adjusting the operation of the transmitter portion based upon the first signal power measurement and the second signal power measurement.

15. A radio frequency communication system comprising:
transmitter circuitry for generating a radio frequency signal, the output of the transmitter circuitry coupled to a least one antenna;
switching circuitry having an input coupled to the at least one antenna, an output, and at least a first mode and a second mode of operation, the first mode of the switching circuitry passing a signal from the input to the output with a relatively lower level of attenuation, and the second mode of the switching circuitry passing a signal from the input to the output with a relatively higher level of attenuation;

receiver circuitry for accepting a radio frequency signal from the output of the switching circuitry, the receiver circuitry producing at least a receive signal strength indicator; and

the radio frequency communication system adjusting at least one characteristic of the receive signal strength indicator using the switching circuitry and the transmitter circuitry.

16. The system of claim 15 wherein the adjusting is performed on a periodic basis.

17. The system of claim 15 wherein the radio frequency communication system communicates digital information.

18. The system of claim 15 wherein the receiver circuitry and the transmitter circuitry are located within the same integrated circuit.

19. The system of claim 15 wherein the at least one characteristic comprises at least one of the slope and the fixed offset of the receive signal strength indicator.

20. The method of claim 15 wherein the adjusting comprises modifying the value of the receive signal strength indicator using an affine function.

21. The method of claim 20 wherein the affine function is implemented using a look-up table.

22. The method of claim 15 wherein the adjusting comprises modifying at least one threshold related to receive signal strength indicator data used in the operation of the radio frequency communication system.